

December 9, 2005

Marlene H. Dortch, Secretary Federal Communications Commission Office of the Secretary 445 12th Street, SW Washington, DC 20554

> Re: WT Docket 96-86 WT Docket 05-157

Dear Ms. Dortch:

Pursuant to Section 1.1206(b)(2) of the Commission's Rules, this is to notify you that on December 8, 2005, Steve Sharkey and Stuart Overby of Motorola, met with Cathleen Massey, Michael Wilhelm, and Timothy C. Maguire of the Wireless Telecommunications Bureau regarding the above captioned proceedings.

During the meetings we discussed the attached presentation with proposals for accommodating wideband and broadband communications for public safety in the 700 MHz band and for providing narrowband voice channels for federal and critical infrastructure users using two of the four megahertz of spectrum returned to the Commission by Nextel as part of the 800 MHz rebanding decision.

Pursuant to the Commission's Rules, one copy of this notice is being filed electronically with the Commission. If you require any additional information please contact the undersigned at (202) 371-6953.

Sincerely,

/s/ Steve B. Sharkey

Steve B. Sharkey, Director Director, Spectrum and Standards Strategy

Cc: Cathleen Massey
Michael Wilhelm
Timothy C. Maguire



## 700 MHz Band Recommendations

- Wideband/Broadband
- Use of the 700 MHz Nextel Giveback

December 8, 2005

# **Background**

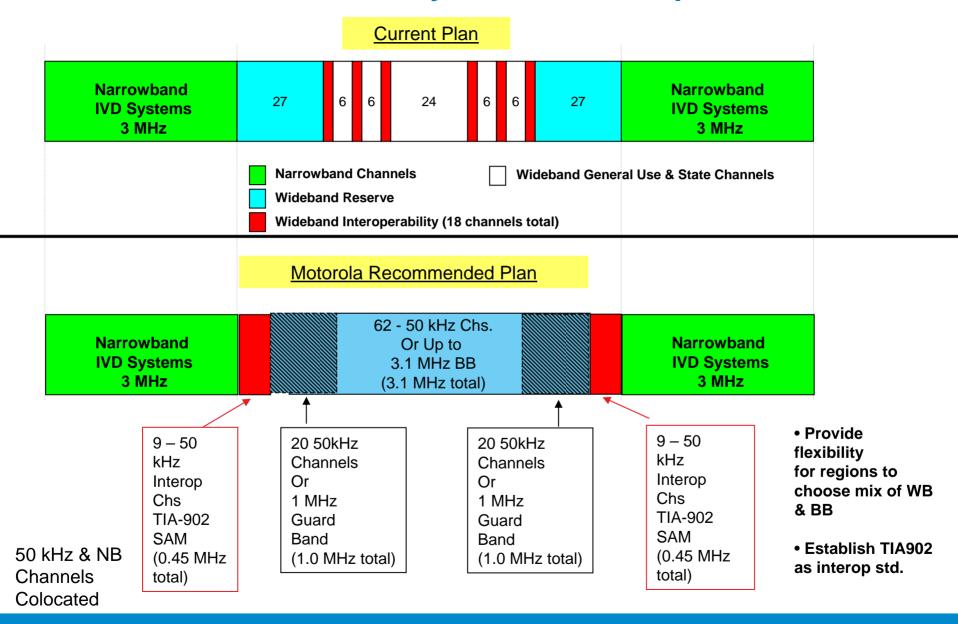
#### NPSTC 11/18/05 Ex Parte set forth a recommended framework:

- Issuance of Further NPRM on bandplan options & interoperability
- No alteration of narrowband voice blocks
- Invited input on bandplan options

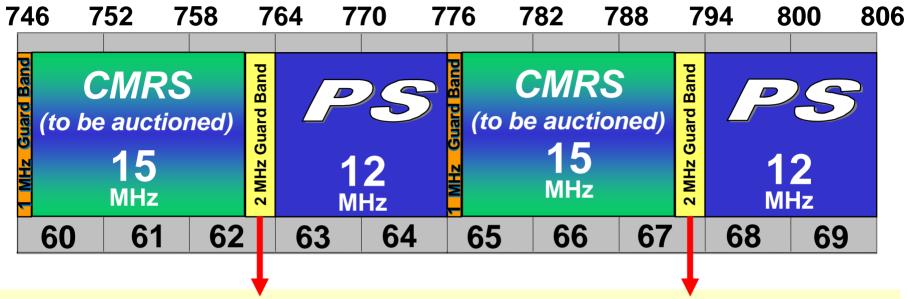
#### Motorola 10/26/05 Ex Parte addressed key wideband/broadband technical tradeoffs:

- Coverage/Data Rate: Wideband provides greater coverage; broadband provides higher data rates
- Likely that needs will vary across the range of public safety customers
- Guardband/Spectrum Efficiency: 1 MHz of guardband needed on each side of broadband to protect voice or wideband use
- Interoperability: TIA 902 the only documented wideband or broadband standard designed based on public safety requirements

### **Public Safety 700 MHz Bandplan**



# Potential Federal/Critical Infrastructure Opportunity for 700 MHz Wide Area Spectrum



- DHS/FCC/NTIA seeking opportunities for improved interoperability.
- 2 + 2 MHz Guardbands will be in play since Nextel returned them to FCC as part of 800 rebanding decision
- Analysis shows 1+1 of the 2+2 still needed for guardband protection
- Recommendation: Provide 763-764/793-794 for Federal and Critical Infrastructrure P25 interoperability with state & local agencies
- 1 + 1 MHz = Eighty 12.5 kHz P25 channels



## **Summary Recommendations**

- Channelize reserve at 50 kHz for consistent plan across the band
- Relocate the 18 50 kHz wideband interop channels next to NB spectrum
  - Also supported by M/A-COM
- Allow aggregation up to 3.1 MHz outside designated interop channels on a regional decision basis
  - Provides RPC's/users flexibility to choose the solution right for their needs: Limited number of broadband systems with higher data rates/more sites or more independent interoperable wideband systems with moderate data rates/fewer sites
  - 50, 150 kHz and 1.25 MHz the most likely options today, but plan leaves option open in case a future broadband technology uses other bandwidths
- Require TIA-902 SAM operation on the interop channels and capability in each WB & BB radio
- Continue to seek better broadband solutions
  - NPSTC noted that regardless of FNPRM outcome, additional spectrum needed for BB
- Designate 1 +1 MHz of 700 guardband Nextel surrendered in the rebanding proceeding for Federal/Critical Infrastructure P25 interoperability with state & local, leaving remaining 1+1 MHz next to CMRS band as guardband
  - Provides Eighty 12.5 kHz channel pairs
  - Current rules allow state and local agencies to enter into MOU's within the public safety spectrum, however, there is unlikely to be extra capacity in major urban areas



#### **Benefits of Motorola Recommendations**

- Protects voice spectrum based on engineering analysis
- Supports option for users to choose best fit data solution
  - Match data rate/coverage/cost requirements
- Provides necessary foundation for data interoperability
- Offers Federal & Critical Infrastructure 700 MHz improved voice interoperability/compatibility with Local and State Public Safety agencies